FIG. 1A

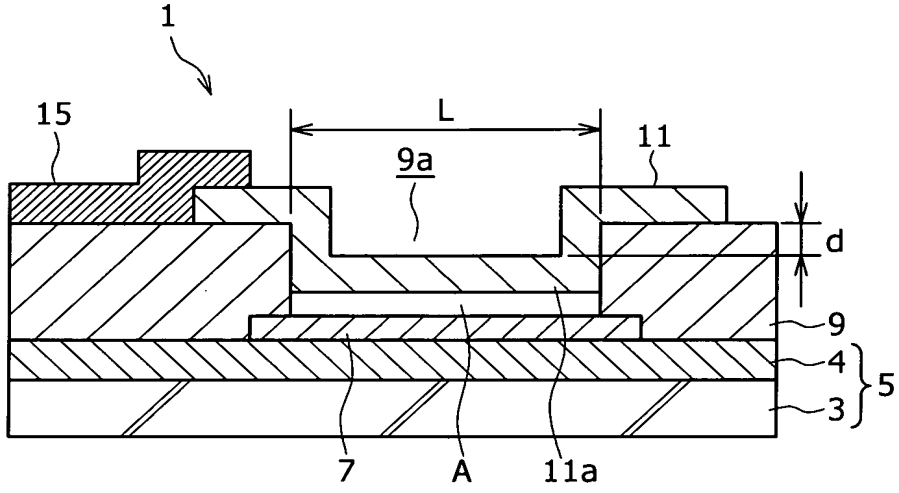


FIG. 1B

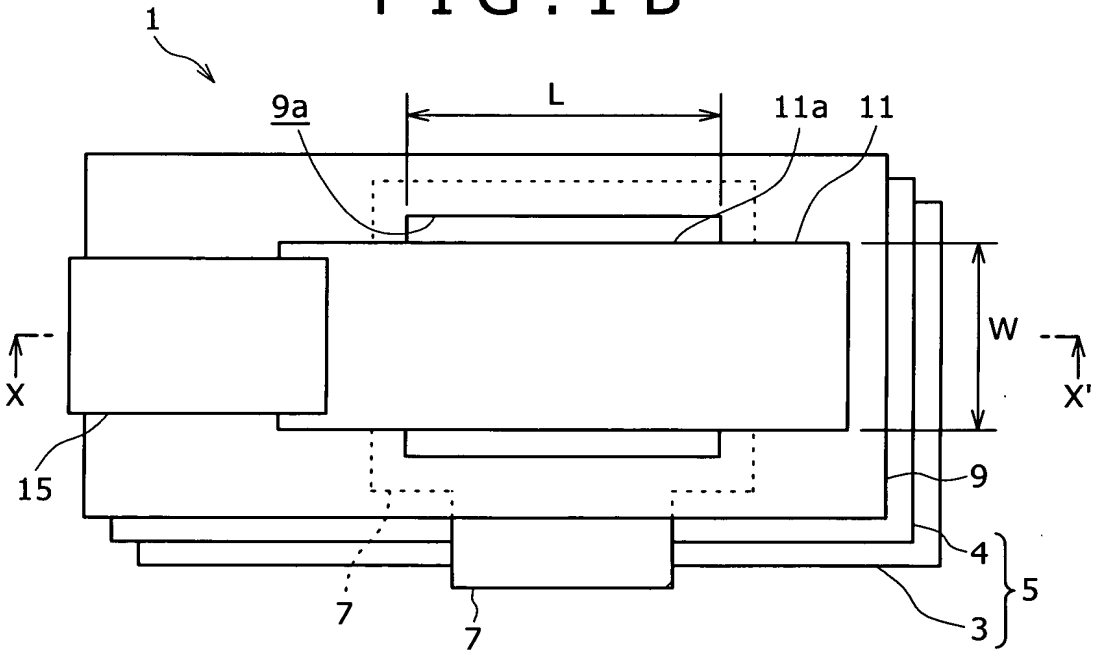


FIG. 2A

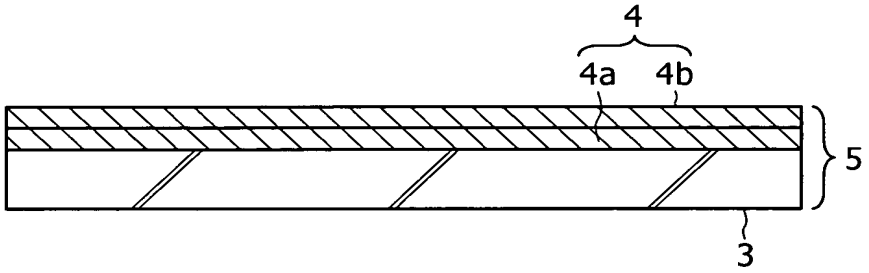


FIG. 2B

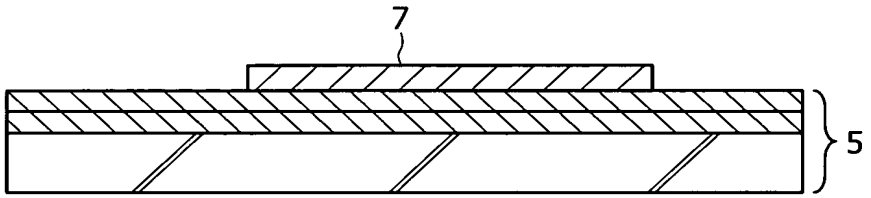


FIG. 2C

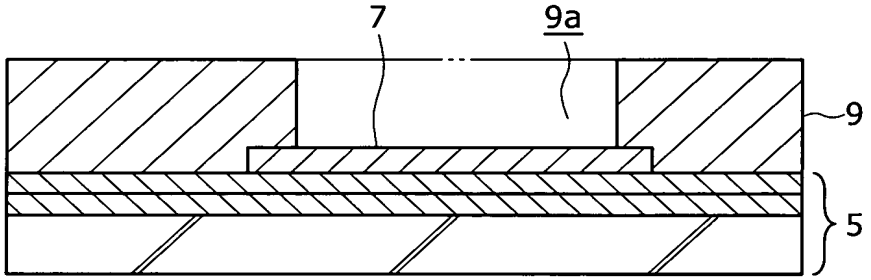


FIG. 2D

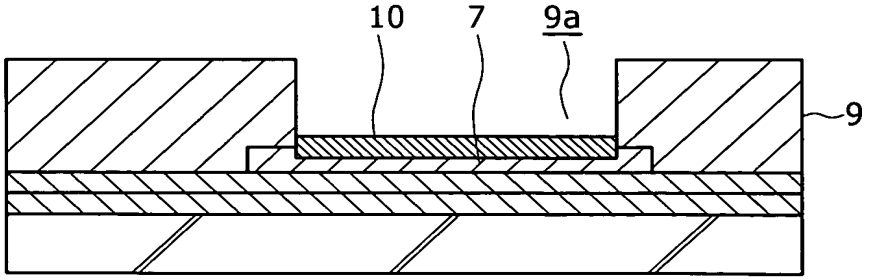


FIG. 3A

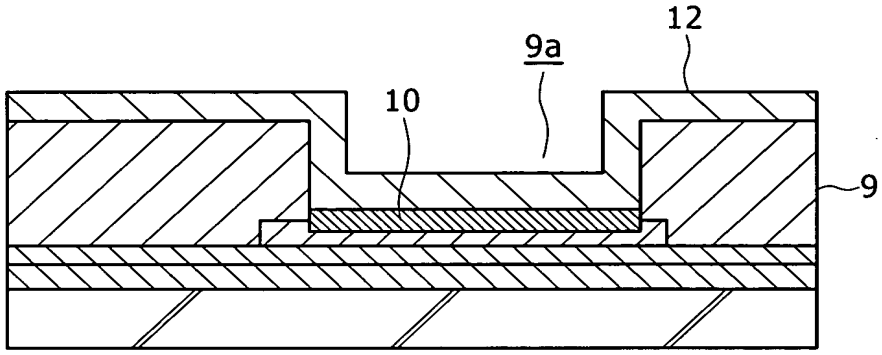


FIG. 3B

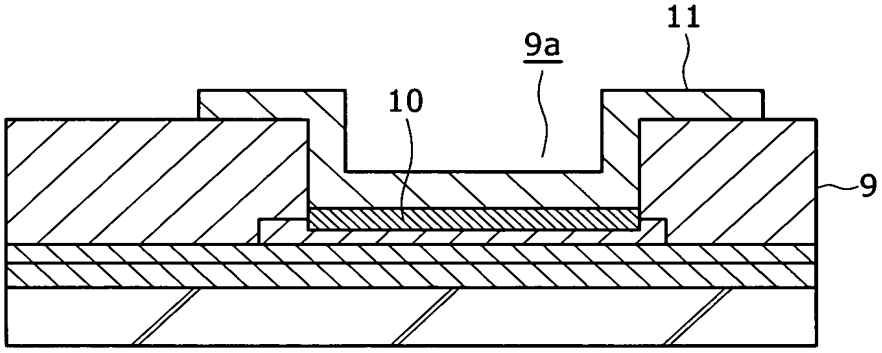


FIG. 3C

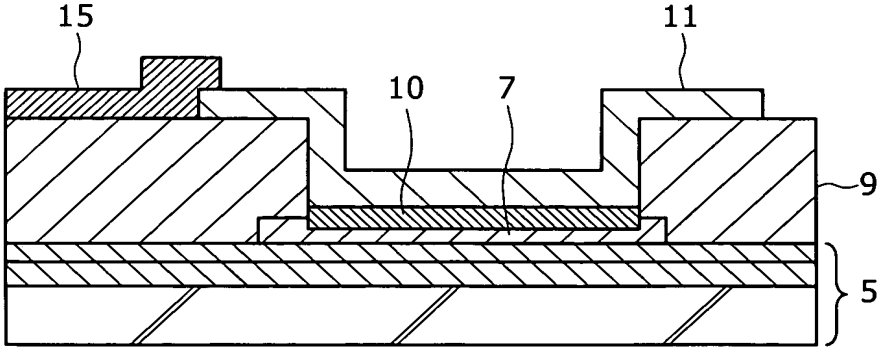


FIG. 4

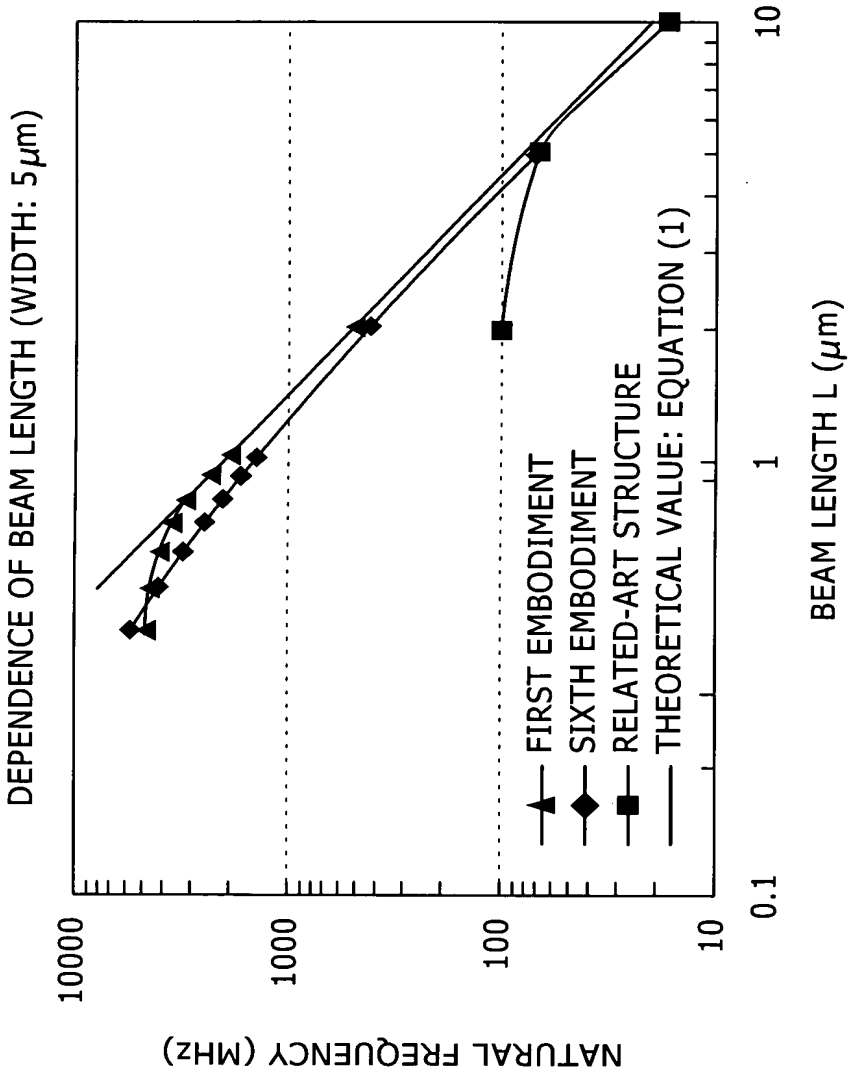

DEPENDENCE OF BEAM LENGTH (WIDTH: 5μm)
NATURAL FREQUENCY (MHz)
10000
1000
100
10
0.1
1
10
BEAM LENGTH L (μm)
FIRST EMBODIMENT
SIXTH EMBODIMENT
RELATED-ART STRUCTURE
THEORETICAL VALUE: EQUATION (1)

FIG. 5A

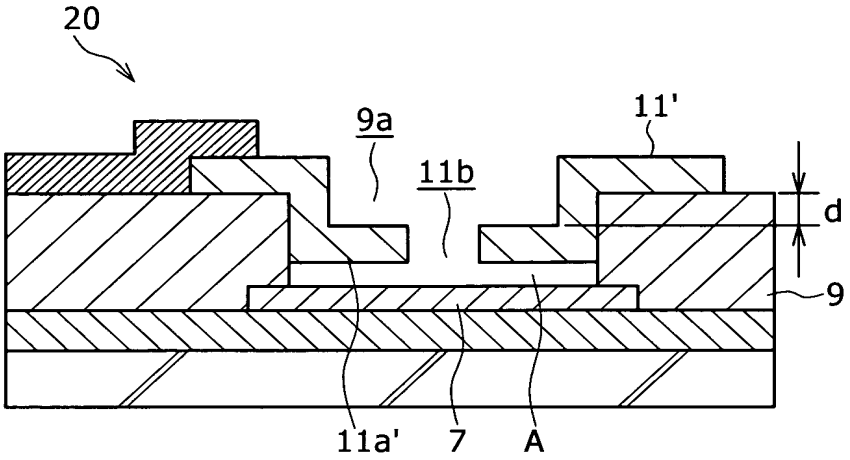


FIG. 5B

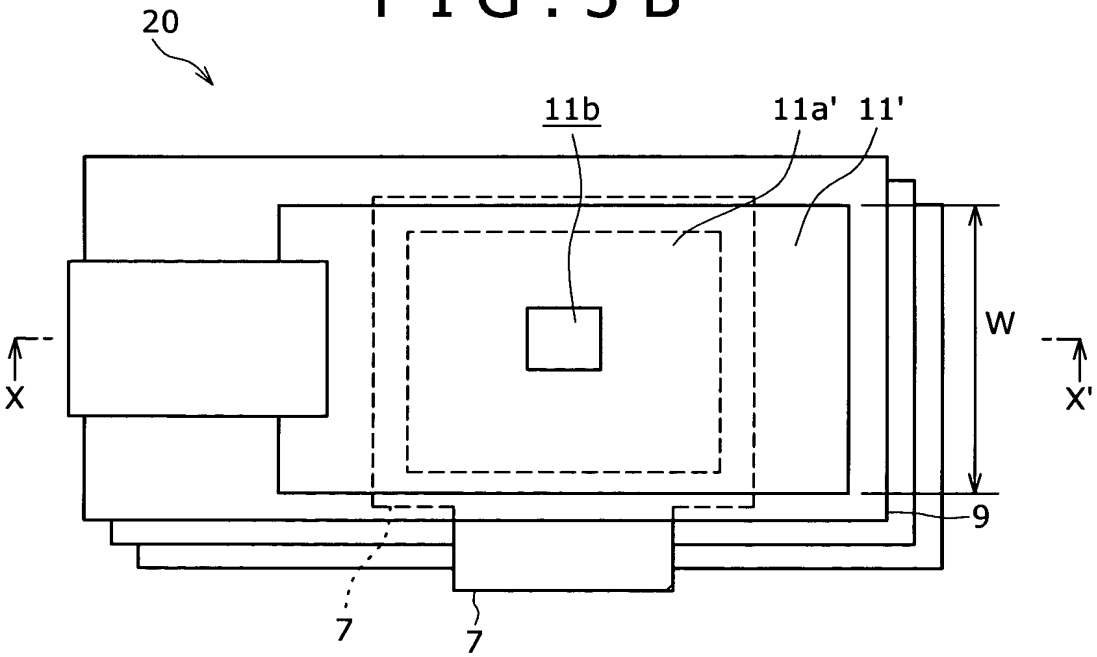


FIG. 6

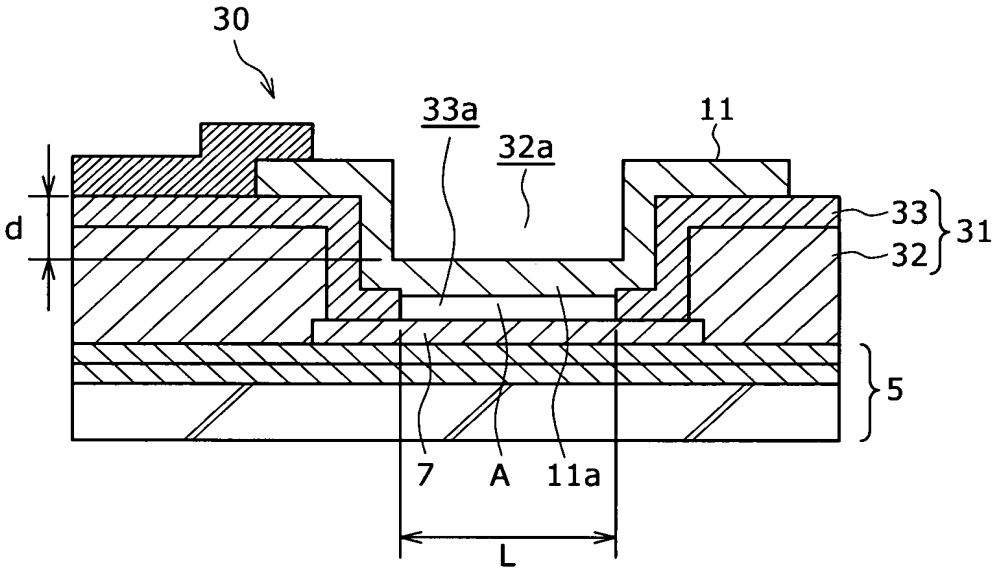


FIG. 7A

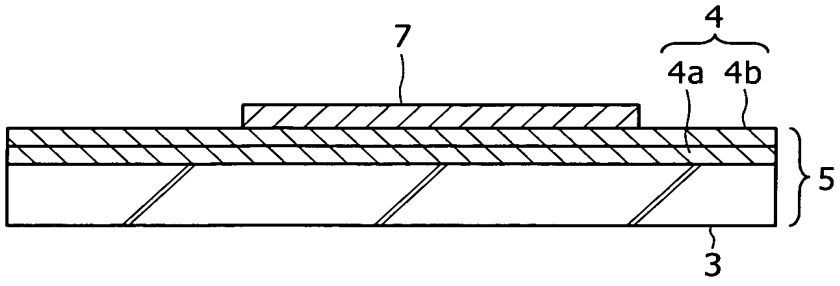


FIG. 7B

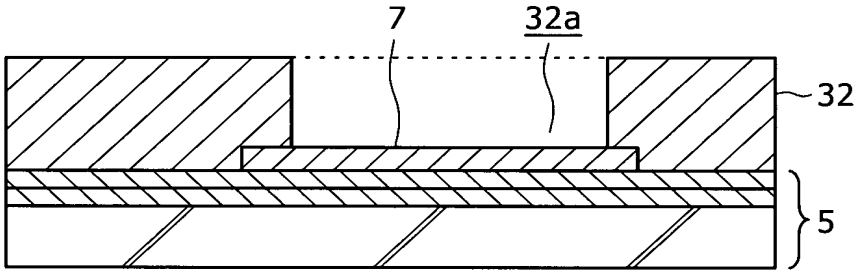


FIG. 7C

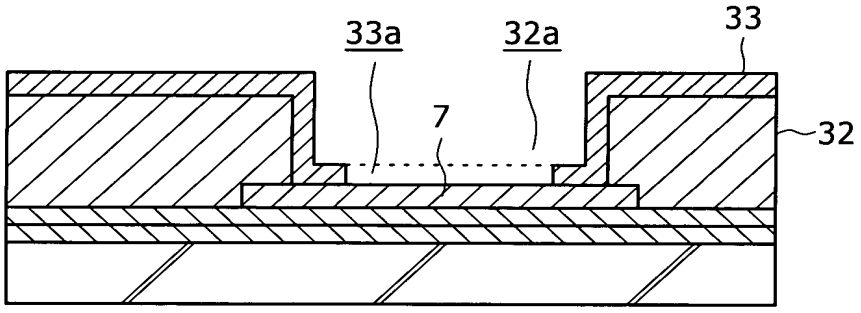


FIG. 7D

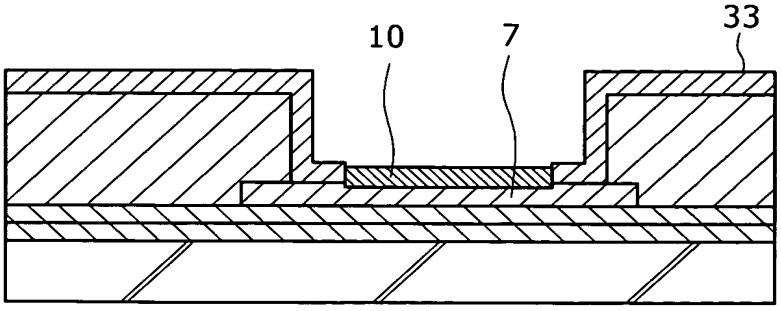


FIG. 8A

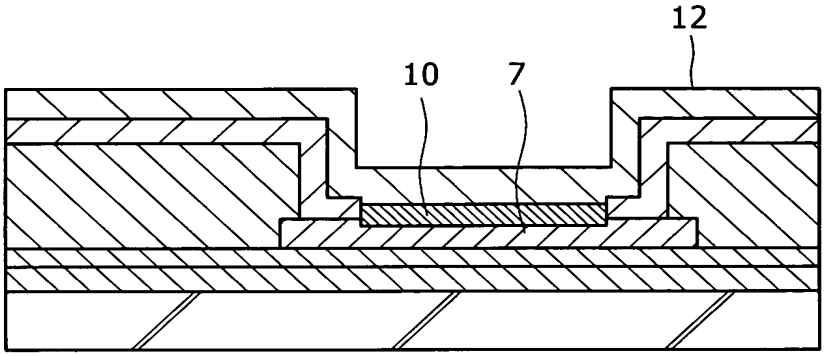


FIG. 8B

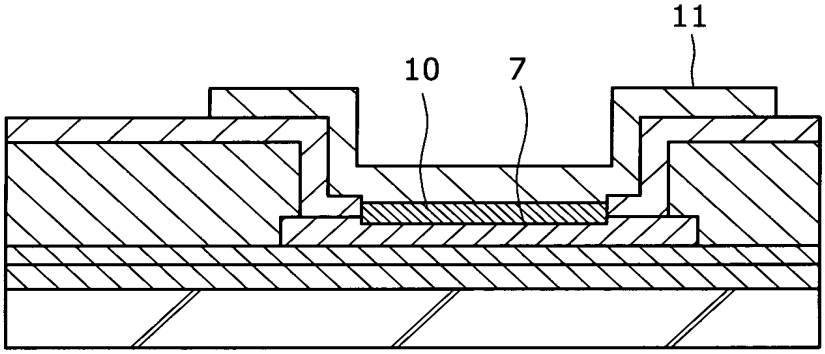


FIG. 8C

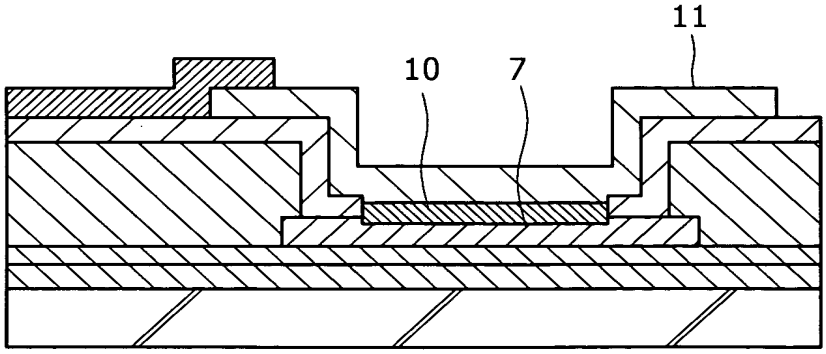


FIG. 9A

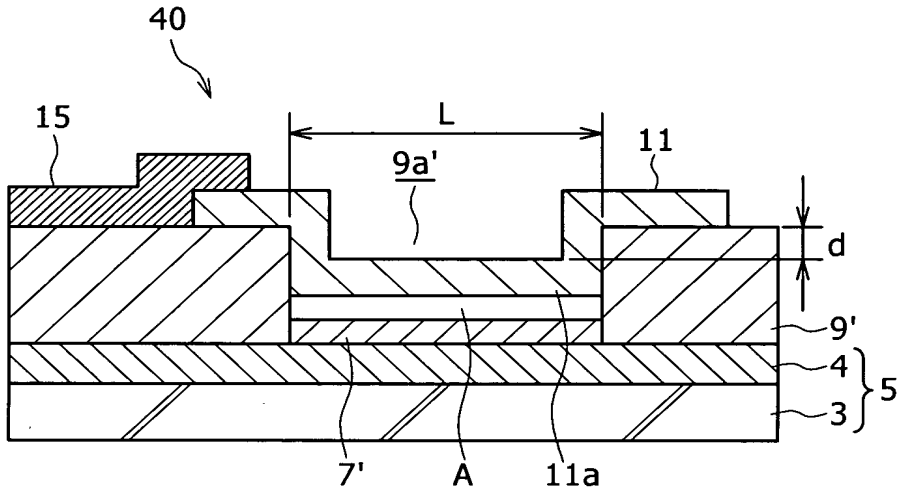


FIG. 9B

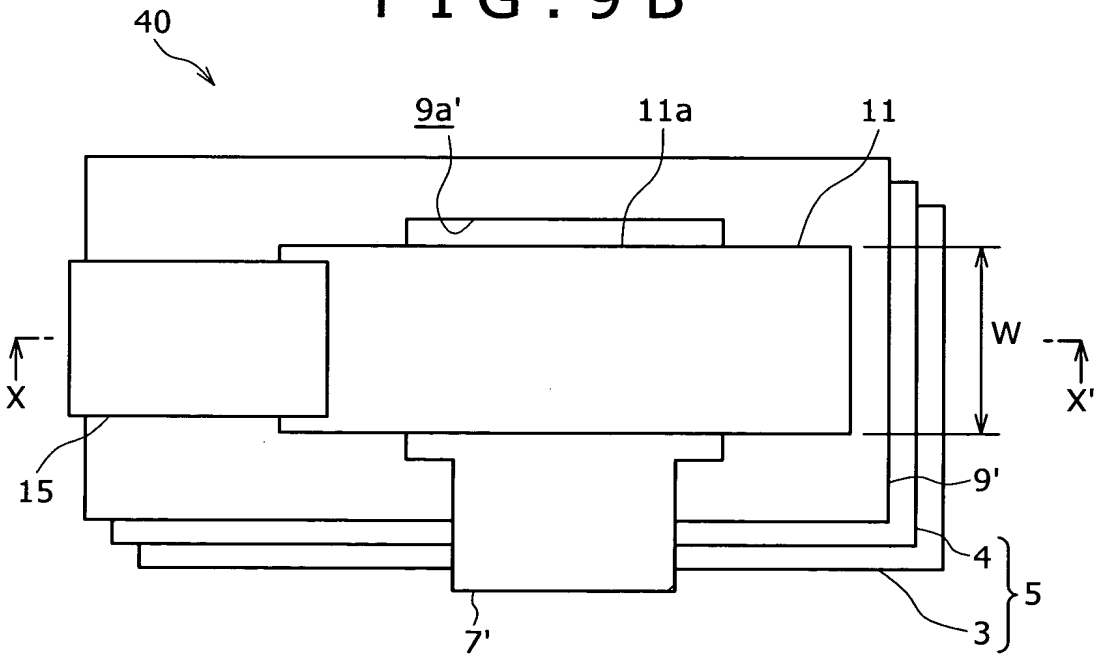


FIG. 10A

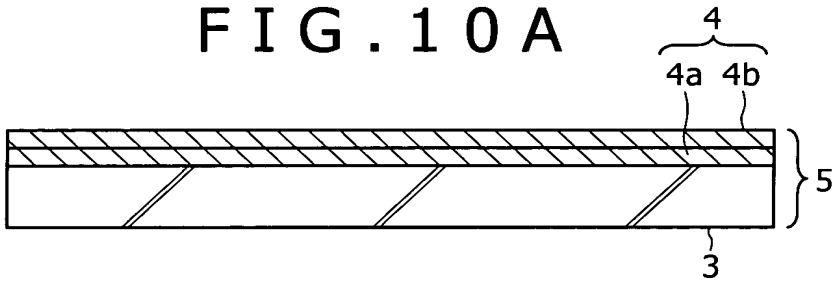


FIG. 10B

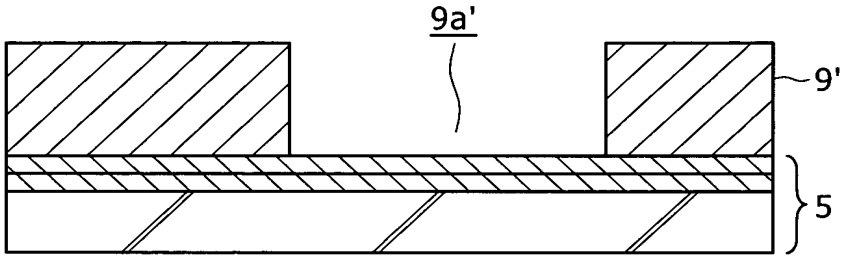


FIG. 10C

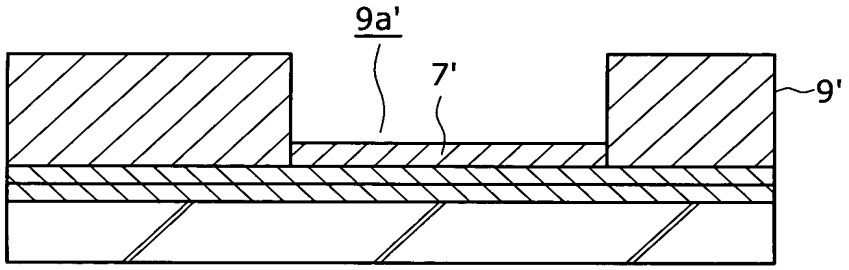


FIG. 10D

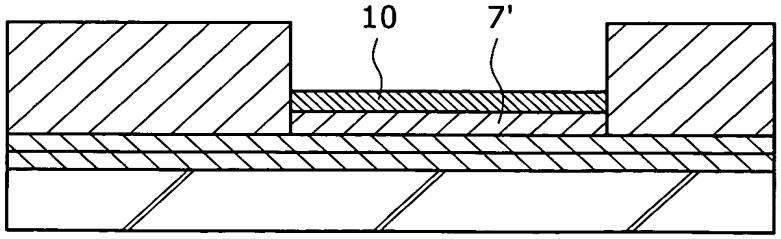


FIG. 11

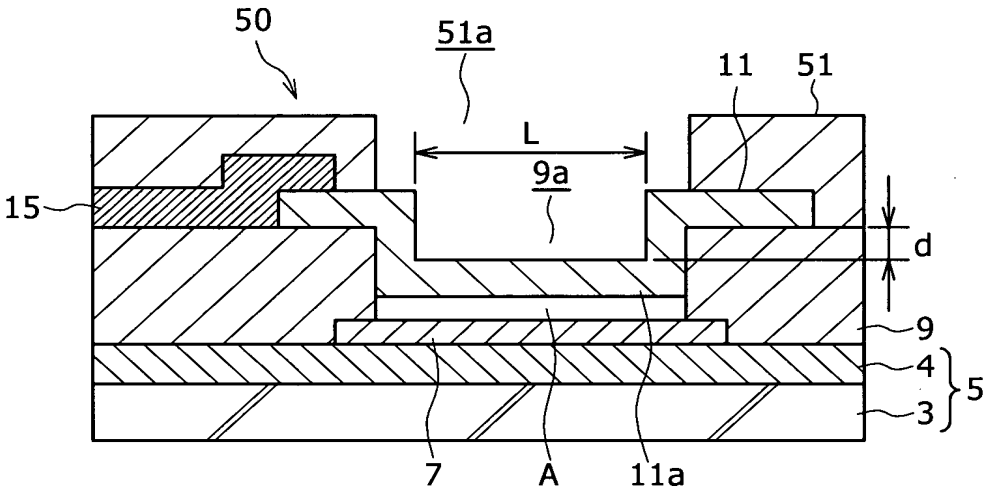


FIG. 12A

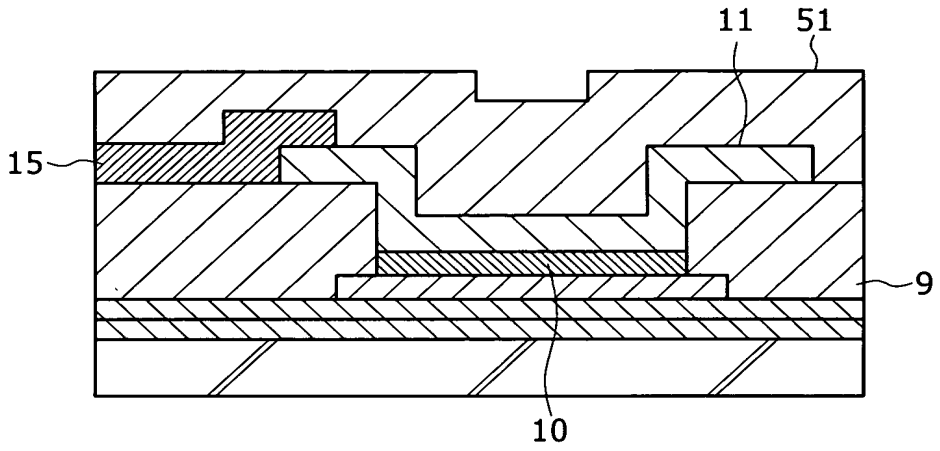


FIG. 12B

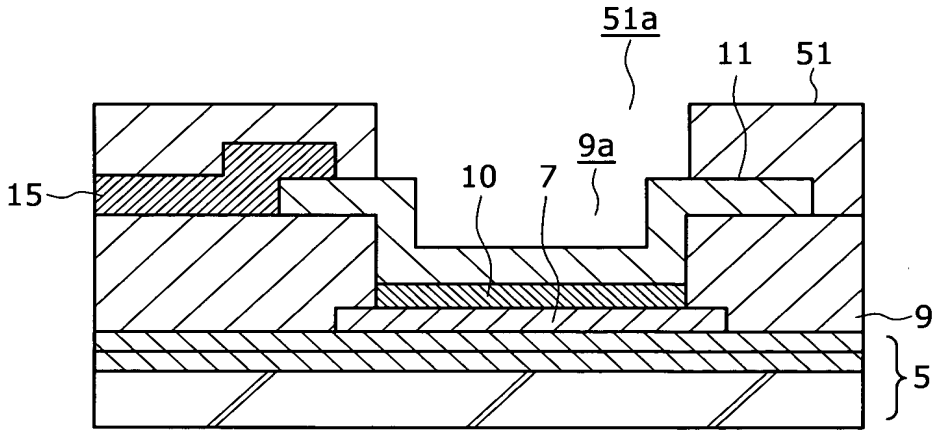


FIG. 13

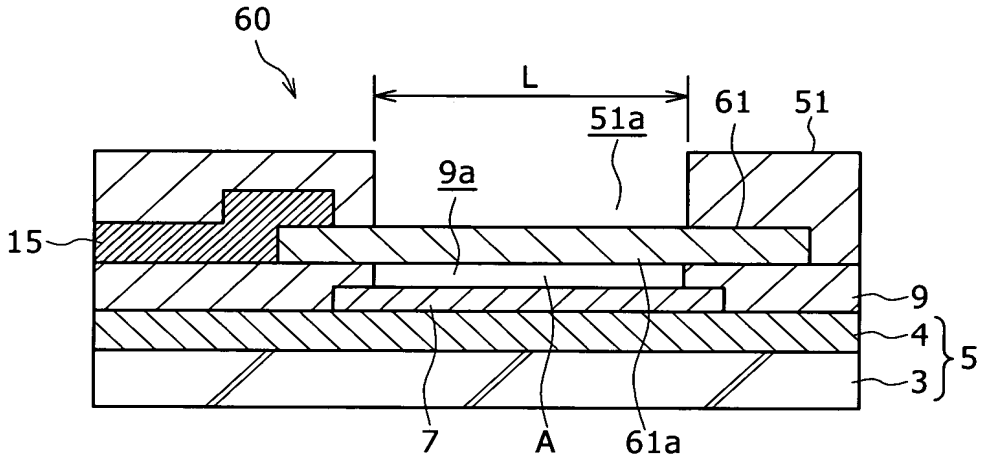


FIG. 14

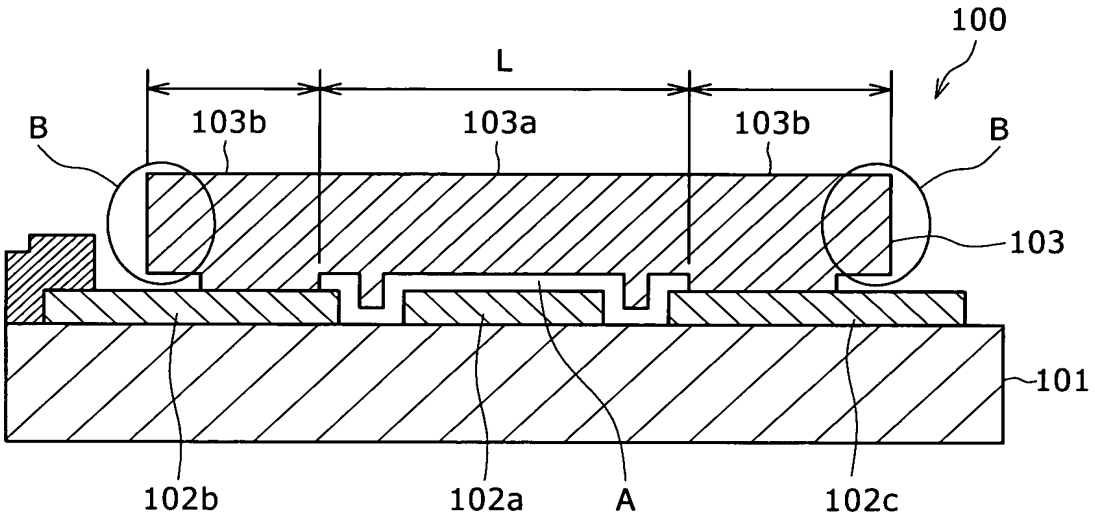


FIG. 15A

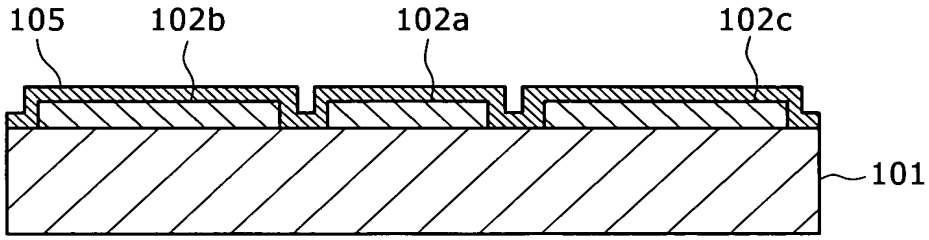


FIG. 15B

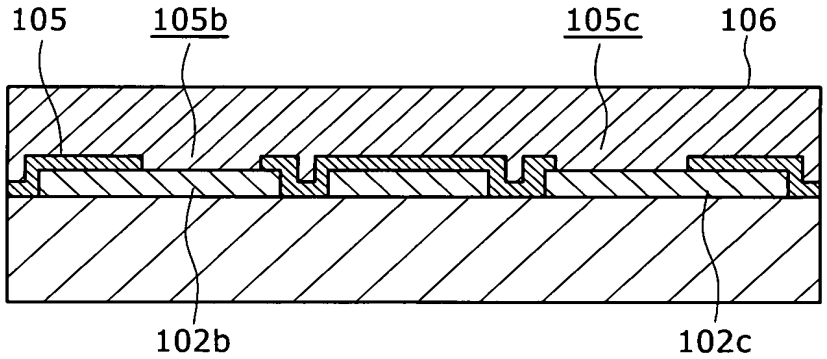


FIG. 15C

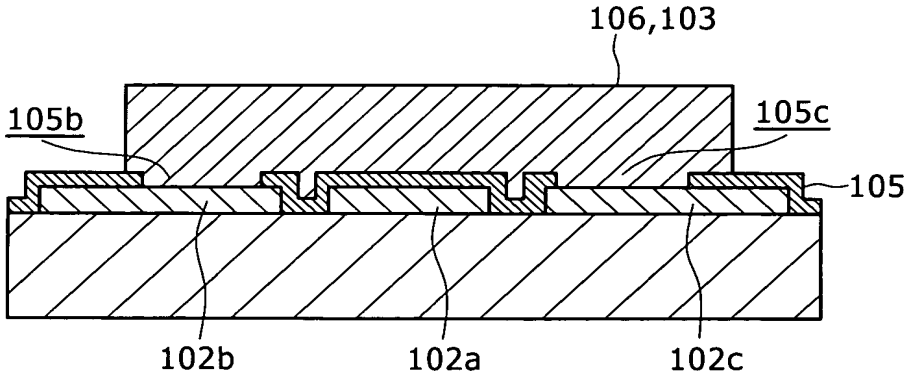
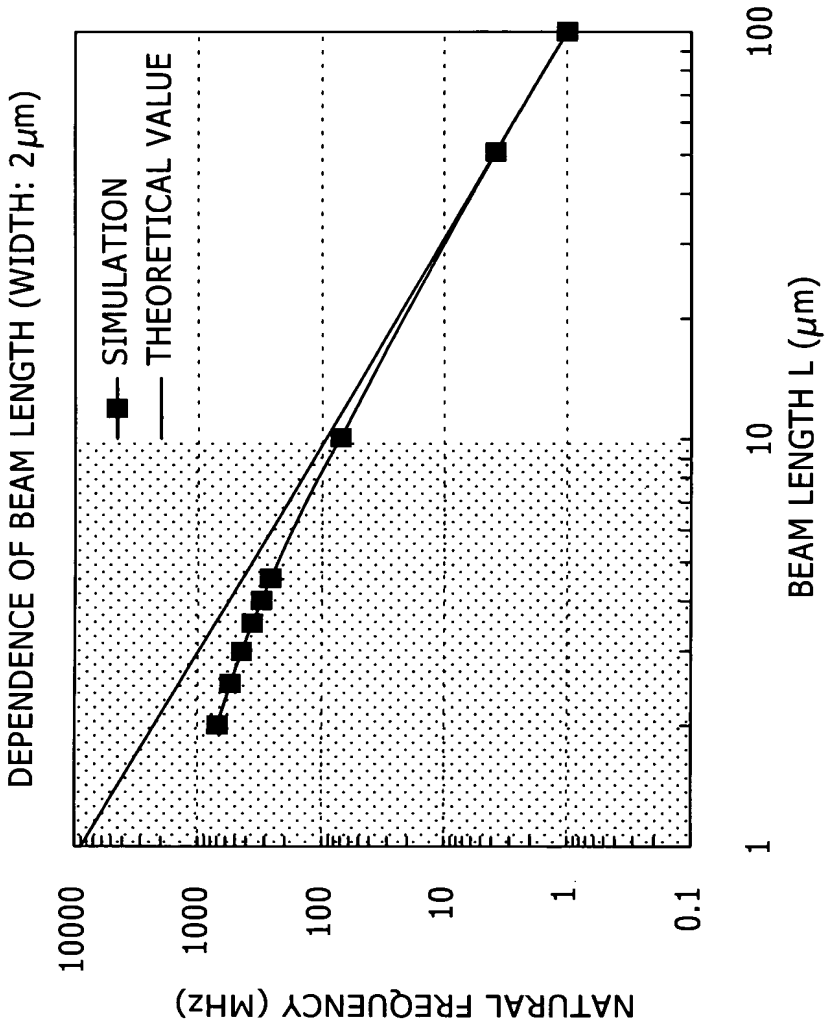


FIG. 16


DEPENDENCE OF BEAM LENGTH (WIDTH: 2μm)
SIMULATION
THEORETICAL VALUE
NATURAL FREQUENCY (MHz)
10000
1000
100
10
1
0.1
1
10
100
BEAM LENGTH L (μm)